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Introduction¹

Frantzis, (1998) hypothesised a potential link between acoustic trials of NRV *Alliance* with a stranding of Cuvier's beaked whales on the Greek coast in 1996. To address this issue, SACLANTCEN convened a Bioacoustic Panel of National Experts (Annex AA), with knowledge of acoustic influence on mammals in the marine environment or behaviour of the species, to provide an expert opinion as to the connection, if any, between the NATO Shallow Water Acoustic Classification (SWAC) research in the Kyparissiakos Gulf in May 1996, and the strandings of Cuvier's beaked whales that occurred in the same general time and area, and to provide advice as to the event. The Panel convened 15-17 June 1998, at the SACLANT Undersea Research Centre in La Spezia, Italy, under the joint chairpersonship of Ing. Wim C. Verboom (The Netherlands) and Ms Angela D'Amico (SACLANTCEN). The terms of reference are given in Annex A.

Analysis and collation of data was carried out in advance by several independent scientists, who presented their findings to the panel. This data consisted of a summary of the sea trial conducted during that time period, details of the source transmissions, a summary of knowledge of the habitats and bioacoustic characteristics of Cuvier's beaked whales, and analysis of the acoustic data. Information related to the details of the stranding was provided by the Hellenic Cetacean Research and Conservation Society of Greece, which included locations and estimated time of the whale strandings and reports from biological analyses conducted on the animals.

The panel was asked to make recommendations regarding the following:

- Summary of potential causes of the whale strandings.
- Whether sufficient records exist to warrant further investigation of each cause
 - specifically determine whether further or independent investigation of the acoustic records is likely to determine or rule out cause and effect and hence
- the utility of further scientific investigation into this incident.
- Data sets which are scientifically relevant and desirable for release to further scientific knowledge (subject to further review regarding classification and releasability).
- Identify any practices of active sonar operation in this event that could be dangerous to marine mammals.
- Other areas of advice as deemed appropriate by the Chairperson.

 1 All references to dB in this document refer to dB re 1 μ Pa at 1 m unless otherwise stated (see Annexes B, C and D).

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• Dissenting opinions, if any.

The conclusions and recommendations of the Panel are summarised on page 1-2 and discussed in Section 2 on page 2-56.